



WATER

ENERGY

SPACE SCIENCE

COMMUNITY
WELLBEING

FOOD SECURITY

BIOTECHNOLOGY

MOBILITY

ENTREPRENEURSHIP

RESEARCH CENTERS

AT UNITED ARAB
EMIRATES UNIVERSITY

RESEARCH CENTERS



National Water and Energy Center (NWECC)



Zayed Bin Sultan Al Nahyan Center for Health Sciences (ZCHS)



Emirates Center for Mobility Research (ECMR)



Khalifa Center for Genetic Engineering & Biotechnology



National Space Science & Technology Center (NSSTC)



Big Data Analytics Center



The Emirates Center for Happiness Research (ECHR)



Human Capital Research Center



Center for Public Policy and Leadership (CPPL)



Emirates Centre for Entrepreneurship Research



Aspire Research Institute for Food Security in the Drylands



Aspire Precision Medicine Research Institute

NATIONAL WATER AND ENERGY CENTER

The UAEU established the National Water Center (NWC) in 2012. The NWC functioned as a multidisciplinary research and consultancy center in response to the strategic needs of the country and the region. The Emirates Center for Energy and Environment Research (ECEER) was established in 2014 in support of the university's vision of conducting high quality research in Energy and Environment as one of the areas of national priority. Noting the dependency of water and energy on one another, the UAEU resolved the merger of ECEER to the NWC in July 2020 to become the National Water and Energy Center (NWECC).

OUR FOCUS

- Conduct high-quality innovative research activities related to water resources, energy, and environment
- Provide consultation services for governmental and private entities, associations, and businesses in the water and energy sectors
- Transfer of knowledge and technology, innovation, and the provision of scientific and technological services to public and private institutions
- Involvement of graduate students on both Masters and PhD level in research projects
- Administration and supervision of internal and external activities
- Organization of national and international scientific conferences

RESEARCH AREAS

- Integrated water resources management and planning
- Surface and groundwater modeling
- Water quality and contaminant transport
- Water and energy regulations and policies
- Climate Change and Environmental Sustainability
- Smart materials for energy efficiency and conservation
- Environmental Justice and Equity
- Consultancy and studies and researches in renewable energy
- Engineering consultations on alternative energy and research



For more information:



ZAYED BIN SULTAN AL NAHYAN CENTER FOR HEALTH SCIENCES

The United Arab Emirates University, with the generous support of the Zayed Bin Sultan Al Nahyan Charitable and Humanitarian Foundation, has established the Zayed Bin Sultan Al Nahyan Center for Health Sciences (ZCHS). The center was established to support and contribute to the UAEU's mission of becoming a world-class center for applied health research, with national and international outreach and innovation whilst preserving the unique values of the UAE.

OUR FOCUS

- Address emerging health challenges in the UAE
- Provide decision-making support and evidence-based interventions
- Conduct research and develop policies
- Collaborate with stakeholders to strengthen the health-care system
- Promote lifestyle modification initiatives
- Serve as a centralized hub for health-related research and advocacy in the UAE

RESEARCH AREAS

- Population health and clinical epidemiology
- Trauma and injuries
- Mental health
- Maternal and Child Health
- Occupational and environmental health
- Lifestyle determinants of health, behavior change and community development
- Health systems and leadership
- Diabetes and cardiovascular diseases
- Respiratory diseases
- Cancer Research
- Molecular genetics & genomic medicine
- Artificial intelligence and robotics applications in health



For more information:



EMIRATES CENTER FOR MOBILITY RESEARCH

Emirates Center for Mobility Research (ECMR), was established in June 2004 at the United Arab Emirates University, with the objective to boost the university's role in serving the community developmental goals in the fields of road engineering, transportation and traffic safety.

ECMR is registered in the Department of Economic Development, providing a variety of commercial services including the design and development of technological smart mobility solutions, data collection and analysis, road engineering, transportation planning, and policy-making consultation, as well as disseminating technical expertise and knowledge through training programs and workshops.

OUR FOCUS

- Achieve a safe, efficient, and environmentally friendly transportation ecosystem
- Facilitate interdisciplinary research to address transportation challenges
- Enable the interplay of technologies to enhance transportation systems
- Boost disruptive ideas to drive innovation in transportation
- Bridge relationships among stakeholders in the transportation sector
- Disseminate state-of-the-art knowledge to advance transportation solutions



RESEARCH AREAS



Efficient
Infrastructure



Integrated
Mobility



Green
Mobility



Safe
Mobility



Connected &
Autonomous Mobility

**For more
information:**



KHALIFA CENTER FOR GENETIC ENGINEERING & BIOTECHNOLOGY

The Khalifa Center for Genetic Engineering & Biotechnology (KCGEB) was inaugurated in 2014 by His Highness Sheikh Mansour bin Zayed Al Nahyan, Deputy Prime Minister and Minister of Presidential Affairs. Research at the KCGEB is focused on exploring flora of the arid region to generate scientific knowledge to address the global challenges in the food security and sustainable agriculture practice through genomics, genetic engineering and biotechnological innovations.

OUR FOCUS

- Generate scientific knowledge through research and discover underlying principles of how plants respond to abiotic stress
- Develop plants (transgenic and genome-editing) with enhanced abiotic tolerance ability and other traits of economic value
- Build research capacity in the UAE University
- Become a center-of-excellence in research related to genomic and plant sciences for a sustainable economy

RESEARCH AREAS



Genetic Engineering for Crop Improvement



Genomics and Bioinformatics



Translational Research for Crop Development

For more information:



NATIONAL SPACE SCIENCE AND TECHNOLOGY CENTER

The National Space Science and Technology Center (NSSTC) has been established jointly by UAEU, the UAE Space Agency and the Telecommunications and Digital Government Regulatory Authority (ICT-Fund). The creation of the NSSTC was primarily motivated by UAEU's desire to strengthen its role and contribute to the needs of the nation in terms of Space Science and Space Technology in order to become the Space Science and Technology hub for the region. The main focuses of the NSSTC are on research and development, higher education and community outreach.

The center's priorities are three-fold: excellence in Space Science, leadership in Space Technology and providing innovative solutions to social challenges.

OUR FOCUS

- Develop national research programs in Space Science and Technology to serve the UAE's national agenda
- Conduct cutting-edge applied research in Space Science and Technology
- Educate and Train future UAE leaders in Space Science and Technology
- Create new technology and knowhow in Space Science and Technology to transfer to industry
- Promote Space Science and Technology through educational programs and exhibitions

RESEARCH AREAS



Earth
Observation



Satellites
Development



Planetary
Science



Assembly, Integration,
and Testing



Ground Station
Operation



**For more
information:**



BIG DATA ANALYTICS CENTER

The Big Data Analytics Center (BIDAC) is established to address the global surge in digital content and information, ushering in a new era of data-intensive computing. Recognizing the transformative potential of big data analytics, particularly in government services such as healthcare, transportation, and society at large, BIDAC leverages the UAE's robust technology infrastructure to drive innovation. As an interdisciplinary center, BIDAC aims to meet the growing demand for skilled data scientists and analysts, contributing to the nation's interests and benefits while addressing technological and scientific challenges.

OUR FOCUS

- Deliver leading research contributions to Big Data Analytics
- Boost the government and private sector performance and productivity
- Provide interdisciplinary training for highly skilled researchers and leaders in the big data analytics, advanced/predictive analytics, data-intensive computing
- Create a stimulating environment for academic and commercial impact, fostering awareness and knowledge among students and staff
- Promote interactions between industry practitioners and academic researchers
- Foster private-public collaboration

RESEARCH AREAS



AI and Machine Learning



Health Data Science



Natural Language Processing



Medical Images Data Analytics



Data Privacy and Security



Computational Science

For more information:



EMIRATES CENTER FOR HAPPINESS RESEARCH

The United Arab Emirates University has established the Emirates Center for Happiness Research (ECHR), to contribute to the government's efforts towards realizing the United Arab Emirates Vision 2021.

The UAE happiness Index is one of the key national performance indicators of the Vision 2021, of having a cohesive society and preserved identity. Therefore, keeping that in consideration this center aims to research and provide appropriate, evidence-based and implementable measures to enhance happiness and wellbeing and resolve the factors affecting them. The center also offers services to agencies and to the UAE community.

OUR FOCUS

- Conduct evidence-based research on Positive Psychology and Well-being in the UAE
- Conduct Regional and International Conferences, Seminars and Symposiums in the areas related to Happiness and Well-being
- Offer short courses and certifications in happiness and well-being skills
- Provide professional consultancy to improve workplace well-being
- Advise government and organizations on enhancing colleague's overall well-being

RESEARCH AREAS



Positive Education



Community Wellbeing



Youth Happiness Index



Mental Health



Psychological Practice



For more information:



HUMAN CAPITAL RESEARCH CENTER

The Human Capital Research Center focuses on analyzing current trends and future foresight in the job market and skills landscape. Utilizing scientific methods and approaches, the center conducts research to identify future competencies, capabilities, and skills required for the evolving workforce.

By aligning future trends with education outputs, the center aims to enhance career opportunities and readiness for individuals. Ultimately, it contributes to the development of qualified national competencies to meet future labor market demands locally, regionally, and globally, ensuring a sustainable and prosperous future for all.

OUR FOCUS

- Enhance human capital and develop qualified national competencies for future labor market demands
- Conduct research studies on human capital and productivity
- Analyze UAE labor market trends to align academic and professional disciplines



RESEARCH AREAS

- Human resources management and development
- Career development
- Competencies and future needed skills
- Aligning employee development with organizational and labor market needs
- Inflation and unemployment
- Higher education, labor market trends, and economic growth
- Workforce planning
- Academic and professional disciplines
- Education-job mismatch in the labor market for graduates
- Future disciplines and jobs
- Agile workforce
- Challenges affecting the contemporary recruitment and selection strategies

For more information:



CENTER FOR PUBLIC POLICY AND LEADERSHIP

The United Arab Emirates University (UAEU) Center for Public Policy and Leadership is a specialized academic and research unit serving the governmental institutions, federal and local, alongside the private sector, by providing effective solutions and innovative approaches towards various governance issues.

The Center is a unique national resource of expertise, which works towards using national and international experts to serve the objectives of the state through the integration of the academic approaches with stakeholder participation to reach well-timed promising outcomes. To achieve its goals, the Center collaborates closely with researchers and academics in both UAEU and international research institutions, and responds quickly to accelerated issues.

OUR FOCUS

- To provide consultation services on public policy issues to decision makers in the UAE
- To contribute to enhancing national leadership capacities by offering effective professional programs
- To strategize qualitative public policies that reflect the visionary leadership of the UAE's policy makers



RESEARCH AREAS



Economic Policies



Security Policies



Social Policies



Health Policies



Labor Policies



Education Policies



Media Policies



Governance Programs and Government Excellence

For more information:



EMIRATES CENTRE FOR ENTREPRENEURSHIP RESEARCH

The Emirates Centre for Entrepreneurship Research, promoted by the College of Business and Economics (CBE) at UAEU, was established to advance the university's focus on entrepreneurship and is in line with the UAE Government Projects of the Fifty initiative. The aim of the Centre is to produce world-class academic research in the field of entrepreneurship with relevance for policy and practice in the UAE, and for international connections with other academic institutions, companies, and government agencies.

OUR FOCUS

- Conducting and disseminating world-class theoretical and applied research on entrepreneurship
- Aggregating educational initiatives on entrepreneurship to enhance outreach and impact
- Promoting an entrepreneurial culture within UAEU and contributing to future growth
- Mobilizing collaborative efforts within the Emirati entrepreneurial ecosystem
- Serving as a global partner for academia, policymakers, companies, and institutions supporting entrepreneurship-related initiatives

RESEARCH AREAS

- Student entrepreneurship
- Social entrepreneurship
- Women entrepreneurs
- Family business and Entrepreneurship
- Immigrants and entrepreneurship
- entrepreneurship policy and impact
- Convergent Reality (AR/VR/XR) and entrepreneurship
- AI innovation in government and intrapreneurial impacts
- Corporate Entrepreneurship

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ASPIRE RESEARCH INSTITUTE FOR FOOD SECURITY IN THE DRYLANDS

The Aspire Research Institute for Food Security in Drylands, is dedicated to advancing interdisciplinary research and education to address the challenges of food security in arid regions. With a goal to generate and disseminate knowledge and technological innovations, ARIFSID aims to become a global leader in providing tailored management technologies and concepts for sustainable, safe, and resilient food supply systems. Through its international platform, ARIFSID seeks to support the sustainability and resilience of food production in dry ecological zones, both locally in the UAE and across the world.

OUR FOCUS

- High regional impact in addressing food security challenges
- Contribution to achieving the UN's Sustainable Development Goals
- Establishment of long-lasting national and international partnerships in research and education
- Collaboration with diverse industries to support food and agricultural sector
- Support for farmers and entrepreneurs in the food industry
- Involvement of the public, particularly youth, in food security initiatives

RESEARCH AREAS



Urban Waste
Material Recycling



Urban Plant and
Fish Farming



Climate Change, markets,
and consumers



One Health



UAE Agricultural
Genetic Resources



ASPIRE PRECISION MEDICINE RESEARCH INSTITUTE

ASPIRE Precision Medicine Research Institute (APMAD) is set to revolutionize Abu Dhabi's biotechnology research and healthcare, creating permanent improvements that will notably increase life quality and longevity. We aim to lessen the burden caused by non-communicable diseases through precision medicine, where individualized treatments are based on scientific principles. Our Virtual Research Institute will establish a scientific toolkit centered on biomarkers, used to confirm disease states and predict therapy outcomes. By proposing research projects targeting prevalent diseases in Abu Dhabi, our findings, facilitated by our partnership with SEHA, will quickly integrate into improved clinical care. To maintain globally competitive research, an upgrade of the entire biotechnology ecosystem in Abu Dhabi is essential.

OUR FOCUS

- Development of specialized research platforms for generating biomarkers
- Ensure long-term sustainability by transforming platforms into accessible cost centers
- Foster Emirati talent and influencing the ecosystem positively
- Establish a talent pipeline from undergraduates to faculty members
- Encourage involvement and education at every stage of the talent pipeline
- Emphasize lifelong education and leadership training for all

RESEARCH AREAS



Brain Health



Metabolic Disorders



Cancer Research



Genetic Disorders





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